PROPOSED USE OF THE PLENARY POWERS (a) TO DESIGNATE TYPE SPECIES IN HARMONY WITH ACCUSTOMED USAGE FOR THE GENERA "ENCRINURUS" EMMRICH, 1844, AND "ODONTOCHILE" HAWLE & CORDA, 1847, AND (b) TO VALIDATE THE SPECIFIC NAME "PUNCTATUS" WAHLENBERG, 1821, AS PUBLISHED IN THE COMBINATION "ENTOMOSTRACITES PUNCTATUS" (CLASS TRILOBITA)

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Plate 3

(Commission Reference: Z.N.(S.) 1059)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate Entomostracites punctatus Wahlenberg, 1821, as represented by the pygidium, as the type species of the genus Encrinurus Emmrich, 1844 (Class Trilobita), and to suppress the name Trilobus punctatus Brünnich, 1781, for all purposes. This application is made in order to avoid confusion in the nomenclature of this widely occurring Ordovician and Silurian genus, and also to obtain a ruling for incorporation in the Treatise on Invertebrate Paleontology.

- 2. M. T. Brünnich in 1781 (: 394) described, but did not figure, a trilobite as "Trilobus punctatus, annulis corporis punctis per series transversim notatis".
- **3.** G. Wahlenberg in 1821 (: 32, pl. ii, figs. 1, 1*) described and figured a cranidium and a pygidium as *Entomostracites punctatus* quoting Brünnich as the author. The cranidium illustrated as fig. 1 represents a calymenid; the pygidium illustrated as fig. 1* is of the form now always accepted as characterising *Encrinurus*.
- 4. H. F. Emmrich in 1844 (: 16) founded the genus *Encrinurus* upon *Entomostracites punctatus* Wahlenberg, 1821, the only species which he referred to the genus. Both the derivation of the name *Encrinurus* and the diagnosis of the genus indicate that Emmrich was impressed chiefly by the characters of the pygidium.

- 5. W. F. Whittard in 1938 (: 122) recorded that Professor Christian Poulsen (Copenhagen) and he had examined Brünnich's two type pygidia, and that probably Trilobus punctatus Brünnich, 1781 and Dalmanites [sic] hausmanni (Brongniart, 1822) are synonymous. Whittard stated his opinion that the pygidium figured by Wahlenberg automatically became the type specimen of Encrinurus punctatus, overlooking the fact that Wahlenberg had quoted Brünnich as the author of the species. If Whittard and Poulsen's opinions concerning Trilobus punctatus Brünnich, 1781, are correct and if the normal provisions of the rules were applied in this case there would be immense confusion for the name Encrinurus, the type genus of a widely distributed family, would be transferred to a species belonging to an entirely different family of trilobites, and the species named Asaphus hausmanni Brongniart would need to be referred to the synonymy of Encrinurus punctatus Brünnich.
- 6. In order to avoid the necessity for this change in current nomenclature, we recommend that the combination Entomostracites punctatus, as published by Wahlenberg, 1821, is to be treated as a combination then published for the first time. In anticipation of the approval of the Commission to this application, we hereby select the pygidium which Wahlenberg, 1821, figured as pl. ii, fig. 1* as the lectotype. This specimen is now preserved in the museum of the Paleontological Institute of Uppsala under the number 1200; it is from Gotland but the exact locality is unknown. A label has been affixed to the specimen stating that it has been selected by the present authors as the lectotype of Entomostracites punctatus Wahlenberg, 1821, and that the International Commission on Zoological Nomenclature has been asked to validate this selection under its Plenary Powers. Annexed to the present application is a plate (Pl. 3) on which are given photographs of the lateral view (fig. 1) and of the dorsal view (fig. 2) of the pygidium of the specimen here selected as the lectotype.
- 7. R. and E. Richter, 1931 (: 140) considered Asaphus hausmanni Brongniart, 1822, to be the type species of the genus Odontochile Hawle & Corda, 1847 (: 208), and this opinion has been followed by later authors. However, Vogdes, 1925, had earlier selected Odontochile applanatus Hawle and Corda, 1847, as the type species. So far as is known Barrande, 1852 (: 538), was correct in regarding these two nominal species as subjectively identical with one another.
- 8. Family-Group Name. The genus Encrinurus Emmrich is the type genus of the family encrinuridae Angelin, 1854 (: 88). This family name should be placed on the Official List of Family-Group Names in Zoology. There is no family-group name based on the genus Odontochile.

Recommendations

9. In the light of the considerations advanced in the present application, the International Commission on Zoological Nomenclature is asked:—

- (1) to use its Plenary Powers :-
 - (a) to suppress the under-mentioned name and the under-mentioned usage of a name for the purposes both of the Law of Priority and of the Law of Homonymy:—
 - (i) punctatus Brünnich, 1781, as published in the combination Trilobus punctatus;
 - (ii) punctatus, all usages of, in combination with the generic name Trilobus Brünnich, 1781, subsequent to Brünnich, 1781, and prior to the publication by Wahlenberg in 1821 of the above specific name in combination with the generic name Entomostracites Wahlenberg, 1821;
 - (b) to direct that the binomen *Entomostracites punctatus* as published by Wahlenberg in 1821 be treated as being a scientific name (binominal combination) then published for the first time and to validate the specific name *punctatus* Wahlenberg, 1821, so published;
 - (c) to direct that the specific name punctatus Wahlenberg, 1821, as published in the combination Entomostracites punctatus, be interpreted by reference to the lectotype selected therefor by Tripp and Whittard in paragraph 6 of, and illustrated in plate 3 annexed to, the present application;
 - (d) under the procedure prescribed by the Thirteenth International Congress of Zoology, Paris, 1948, for determining the type species of a genus based upon a misidentified type genus, (i) to set aside all designations or selections of a type species for the genus Encrinurus Emmrich, 1844 (Class Trilobita) made prior to the Ruling now asked for, and (ii), having done so, to designate as the type species of the above genus the nominal species Entomostracites punctatus Wahlenberg, 1821, as validated under the Plenary Powers under (b) above and as interpreted under the same Powers in (c) above;
 - (e) to set aside all type selections for the genus Odontochile Hawle & Corda, 1847 (Class Trilobita) made prior to the Ruling now asked for, and, having done so, to designate as the type species of the foregoing genus, the nominal species Asaphus hausmanni Brongniart, 1822;
- (2) to place the under-mentioned generic names on the Official List of Generic Names in Zoology:—
 - (a) Encrinurus Emmrich, 1844 (gender: masculine) (type species, by designation under the Plenary Powers under (1)(d) above:

- Entomostracites punctatus Wahlenberg, 1821, as validated and interpreted under the foregoing Powers under (1)(b) and (1)(c) above respectively);
- (b) Odontochile Hawle & Corda, 1847 (gender: masculine) (type species, by designation under the Plenary Powers under (1)(e) above: Asaphus hausmanni Brongniart, 1822);
- (3) to place the under-mentioned specific names on the Official List of Specific Names in Zoology:—
 - (a) punctatus Wahlenberg, 1821, as published in the combination Entomostracites punctatus and as validated and interpreted under the Plenary Powers under (1)(b) and (1)(c) above respectively (specific name of type species of Encrinurus Emmrich, 1844);
 - (b) hausmanni Brongniart, 1822, as published in the combination Asaphus hausmanni (specific name of type species of Odontochile Hawle & Corda, 1847);
- (4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name and the usages of a name specified in (1)(a) above, as there suppressed under the Plenary Powers;
- (5) to place the under-mentioned family-group name on the Official List of Family-Group Names in Zoology: ENCRINURIDAE Angelin, 1854 (type genus: Encrinurus Emmrich, 1844).

References

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- Brongniart, A., 1822, Histoire Naturelle des Crustacés Fossiles, Les Trilobites, Paris
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